



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,640	01/04/2002	Jonathan S. Stinson	792-62 RCE	9194
23869 7590 06/24/2008 HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE SYOSSET, NY 11791				
EXAMINER				
ERIZO, DARWIN P				
ART UNIT		PAPER NUMBER		
3773				
MAIL DATE		DELIVERY MODE		
06/24/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/038,640

Applicant(s)

STINSON, JONATHAN S.

Examiner

Darwin P. Erezzo

Art Unit

3773

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/26/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6, 76-81, 84-89 and 93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6, 76-81, 84-89 and 93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 6,76-81,84-89 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,860,900 to Clerc et al. and in view of US 5,575,818 to Pinchuk.

(claims **6, 76, 78, 81, 84, 86, 87** and **93**) Clerc discloses a stent (Fig. 6) comprising a tubular structure having a plurality of strands **336** woven to form multiple strand crossings; wherein the strands are selectively formed to provide a first tubular segment (**332,334**) and a second tubular segment **330**. As shown in Fig. 6, the strands within the second tubular segment **330** define an obtuse strand crossing angle that is greater than the obtuse strand crossing angle defined by the strands within first tubular segment (**332,334**) (col. 6, ll. 54-61). It is noted that a characteristic of a higher crossing angle results in a higher level of radially outward force and higher level of axial

flexibility. Therefore, it would be inherent that the first tubular segment (**332,334**) will have a greater axial stiffness level but lesser radial force level than the second tubular segment **330**. It is further noted that Clerc discloses the first and second tubular segments having respective first and second nominal diameters being substantially the same when the tubular structure is in a relaxed state (Fig. 6) and wherein the tubular is radially compressible against an elastic restoring force to a predetermined diameter due to the stent being a self expandable stent.

Clerc fails to disclose the strands selectively formed to provide a plurality of first and second tubular segments.

Pinchuk discloses a similar type of stent, as shown in Fig. 7. The embodiment shown in the figure is directed towards a stent **700** having a single first tubular element **703** and a single second tubular element (locking ring) **714**. However, Pinchuk also discloses that this second tubular element (locking ring) can be disposed along the body of the stent, which would also provide a plurality of discrete first tubular segments (col. 10, ll. 20-22).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Clerc to include a plurality of first and second tubular elements because having multiple second tubular elements will help better secure the stent in the blood vessel. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a plurality of first and second tubular elements, since it has been held that mere duplication of the

essential working parts of a device involves only routine skill in the art. *In re Harza*, 274 F.2d, 669, 124 USPQ 378 (CCPA 1960).

(claims 77, 79, 80, 85, 88 and 89) The strand crossing angles for each of the modified first and second tubular segments are constant (substantially the same), therefore, the axial stiffness levels for each of the tubular segments are substantially the same (the same reason applies for the radial force levels).

Response to Arguments

4. Applicant's arguments filed 2/26/08 have been fully considered but they are not persuasive.
5. The applicant argued that there is no motivation to modify the stent of Clerc to have a plurality of first and second tubular segments arranged in an alternating sequence. However, this is not persuasive because the arrangement of a stent having alternating segments is well known in the art. As stated above, Pinchuk discloses a stent having a multiple ring portions along the length of the stent to provide alternating segments. Furthermore, the arrangement is also shown in US 5,064,435 to Porter, which was presented in the Office action mailed on 11/14/2005, and is being used as an evidentiary reference. Therefore, since having a plurality of first and second tubular segments arranged in alternating sequence is well known in the art, then a mere duplication of the a first and second tubular elements to form said alternating sequence would be well within the reach of one of ordinary skill in the art. The alternating sequence would merely follow how the first and second tubular elements are originally connected, as shown in Fig. 6 of Clerc.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erezo whose telephone number is (571)272-4695. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Darwin P. Erezol/
Primary Examiner, Art Unit 3773